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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,461	07/11/2003	Bernd Matthes	03105/DKT01041	3246
43215	7590	12/08/2005	EXAMINER	
BORGWARNER INC. PATENT DEPARTMENT 3850 HAMLIN ROAD AUBURN HILLS, MI 48326-2872			BONCK, RODNEY H	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,461	Applicant(s) MATTHES ET AL.	
	Examiner Rodney H. Bonck	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,10-14 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,10-14 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>12012005</u> . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

The following action is in response to the amendment received October 19, 2005.

Claim Objections

Claim 1 is objected to because of the following informalities: In line 12 of claim 1, "displace" apparently should be – displaced --. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 5 depends from a cancelled claim, claim 3. Therefore, it is impossible to determine what limitations are incorporated into claim 5. For purposes of examination, it is assumed that claim 5 was intended to be dependent on claim 1. In claim 11, it is unclear what is meant by "formed in the manner of a spacer".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 10, 11, 12, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Black('949). Black discloses a disk comprising a core plate 3 having a front side and a backside. The front side and/or the backside is provided with a friction lining 1, 2 that exhibits a substantially planar surface with at least one area 8 that is raised relative to the planar surface. The raised areas 8 are surrounded by grooves that define the raised areas. Black discloses that the friction lining material can be a material such as synthetic rubber, which would have a spring characteristic. Under sufficient compressive force of clutch engagement, the raised areas 8 would inherently be displaced to be essentially in the same plane as the planar surface. The friction lining in Black is essentially of uniform thickness with the exception of the raised areas, which exhibit a greater thickness. Since the friction lining has imbedded metal particles 6, it can be considered to be formed of multiple pieces, as claimed. The raised area 8 in Black is incorporated into the friction lining 1, 2 and is disclosed as being formed as a flat plateau. The device of Black is a wet disk clutch.

Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Russell('424). Russell discloses a disk with a core plate 31 or 41 (Figs. 5 or 6) with a front side and a backside, each providing a friction lining 30, 32 or 40,42. Russell discloses that the friction lining can be resilient material, such as mixtures of cork, cellulose, asbestos, and temperature resistant binders. Such resilient material would possess a spring characteristic. In column 4, line 69, to column 5, line 7, Russell discloses that the disc could be wedge-shaped such that the inner diameter is lesser or greater in thickness than the outer diameter. Under sufficient clutching pressure against plates 28, the resilient material would inherently become parallel to the core plate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black('949) in view of Whitelaw et al.('710). These claims require that the core plate be thicker in the raised area and that the core plate forms the raised surface. This is not the case in Black. The Whitelaw et al. device discloses a clutch disk wherein the facings 22, 23 (Figs. 7 and 8) are provided with raised areas formed by portions of the core plate 18, 19 of greater axial thickness. The clutch plates are flattened during clutch engagement to ensure maximum engagement area. It would have been obvious to carry this teaching to the Black device, the motivation being to maximize clutch engagement surface area.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Katcher('587) and Daukus('399) show other clutch plates wherein raised portions of the lining are formed by the core plate.

Response to Arguments

The arguments presented in the response of October 19, 2005 have been considered and the previous art rejections have been withdrawn. After reconsideration, it is the examiner's position that the claims are met by the Black, Russell, and Whitelaw et al. references (of record) as set forth above. Since the new grounds of rejection, at

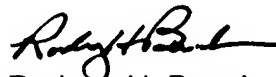
Art Unit: 3681

least with respect to claim 13, are not necessitated by the amendment, this action is not a final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571) 272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
December 1, 2005